

STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

RESOLUTION NO. 95-162

SELECTION OF SUPPLEMENTAL ENVIRONMENTAL PROJECT TO IMPLEMENT  
JUNE 21 AGREEMENT BETWEEN WESTERN MICROWAVE, INC. AND REGIONAL  
BOARD, 1271 REAMWOOD AVENUE, SUNNYVALE, SANTA CLARA COUNTY

WHEREAS, the Board finds:

1. Western Microwave, Inc. (WMI) occupied the property located at 1271 Reamwood Avenue (the site), in the City of Sunnyvale, Santa Clara County from 1979 to 1990. WMI manufactured microwave components at the site. WMI used volatile organic compounds (VOCs) in its manufacturing process and released VOCs to soil and groundwater underneath the site.
2. Pursuant to California Water Code Section 13304, the Board adopted site cleanup requirements (Order No. 93-048) as amended by Order No. 93-088A for WMI to investigate and cleanup of VOCs in soil and groundwater at and originating from the site. Provision C.3(b) of the order (as amended) required WMI to document implementation of interim remedial measures by February 1, 1994. Provision C.3(c) of the order (as amended) required WMI to document completion of remedial investigation by February 1, 1994.
3. On April 19, 1995, the Board imposed administrative civil liability in the amount of \$600,000 against WMI for violating the above provisions (Order No. 95-089). This order was issued pursuant to California Water Code Section 13350. One hundred thousand dollars (\$100,000) of this liability was ordered to be paid to the State Water Pollution Cleanup and Abatement Account within 30 days of the date of the order. The remaining \$500,000 would be suspended by the Board if a satisfactory settlement agreement is reached by June 21, 1995, between WMI and the Board, and if in the Board's opinion the \$500,000 is used for appropriate investigation and remediation of the site.
4. On June 21, 1995, the Board adopted Resolution No. 95-139 and authorized its Executive Officer to sign a settlement agreement between the Board and WMI. The Resolution suspends the remaining \$500,000 of the administrative civil liability imposed by Order No. 95-089 provided that WMI complies with the various requirements in the settlement agreement.
5. The settlement agreement allows WMI to pay \$50,000 of the \$100,000 penalty to a supplemental environmental project selected by the Board at its July 19, 1995, meeting, or an appropriate later meeting. Payment must be made within 30 days of the Board's selection of said project.

6. On July 7, 1995, WMI indicated its preference for a supplemental environmental project through the Marine Science Institute, a non-profit organization in Redwood City. With the \$50,000, Marine Science Institute proposes to educate about 2,600 students and teachers about water quality issues in the San Francisco Bay Estuary.
7. This action is taken to enforce the laws and regulations administered by the Board. This action is categorically exempt from the provisions of CEQA pursuant to Section 15321 of the Resources Agency Guidelines.
8. On July 19, 1995, the Board conducted a public hearing at which WMI appeared, and evidence was received concerning Western Microwave, Inc.

NOW, THEREFORE BE IT RESOLVED, that Western Microwave, Inc. shall pay \$50,000 in lieu of administrative civil liability to Marine Science Institute (a non-profit organization) within 30 days of the date of this resolution, to be used in accordance with the attached supplemental environmental project.

BE IT FURTHER RESOLVED, that if Western Microwave, Inc. fails to pay Marine Science Institute on time, Western Microwave shall pay the \$50,000 of administrative civil liability to the State Water Pollution Cleanup and Abatement Account within 37 days of the date of this resolution.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 19, 1995.

  
STEVEN R. RITCHIE  
Executive Officer

Attachment: Supplemental Environmental Project, July 10, 1995.

MARINE  
SCIENCE  
INSTITUTE



CALIFORNIA REGIONAL WATER

JUL 12 1995

WATER CONTROL BOARD

July 10, 1995

Stephen R. Ritchie  
Executive Officer  
San Francisco Bay Region  
California Regional Water Control Board  
2101 Webster Street, Suite 500  
Oakland, CA 94612

Subject: Supplemental Environmental Project for Western Microwave, Inc.

Dear Mr. Ritchie:

I'm pleased to submit this proposal for your consideration as I believe support of this project will provide exciting, hands-on environmental education for those students who are too often underserved. Funding this proposal, in the amount of \$50,000, will give approximately 2,600 students and teachers the opportunity to learn about water quality issues in the San Francisco Bay Estuary.

### Background

For twenty-five years the Marine Science Institute's programs have focused on the importance of the Estuary. To date, 250,000 students (fifth grade and above) have been introduced to the Bay aboard our "floating classroom," an 85-foot research vessel, using real scientific equipment and techniques. Over the years, feedback from parents, teachers and students has proven to us that Discovery Voyages -- and our related land-based and outreach programs -- work for students of all ages, backgrounds and abilities. This is because our programs are designed to have students learn by doing, and because the content is relevant to students' everyday lives. As these goals are met, our mission to inspire confidence and accomplishment by facilitating an active approach to learning is moving closer to being fulfilled. In addition, the skills used in the programs, including observation, critical thinking, and problem-solving, extend beyond science to other disciplines and, of course, to the students' lives.

A Discovery Voyage program involves more than the actual field study. Students are immersed in two to four weeks of preparation and follow-up using our MSI Education Guide. One topic can be chosen for individual research or chosen as a group theme for the Voyage. A topic may include a particular science such as geology, hydrology, or anatomy and physiology; or a theme such as biodiversity, human impact, food webs, and population estimation. During the actual Voyage, students are guided by three marine instructors while they rotate through four different stations: ichthyology or fish, benthic



ecology, plankton ecology, and water chemistry. They have the opportunity to catch fish, and personally sample the mud, plankton and water in the South Bay. Our current hydrology or water chemistry station begins by making some general hypotheses about the water in regard to clarity, salinity, temperature, and oxygen. Next, water sample collection takes place at different depths with a Van Dorn bottle, followed by water testing and comparison of results. Conclusions are made and water quality issues are illustrated using visuals boards, and sometimes Hach test kits. Point source and non-point source pollution and water usage are always a focus during this station and also at group closing when human impact issues are revealed. A Town Hall meeting is one of our most popular closings and consists of a powerful brainstorming session on how to make effective personal and group decisions about our own community and environment.

### **Project Description**

With the support of this Supplemental Environmental Project in the amount of \$50,000, the Marine Science Institute will extend our reach to students in underprivileged elementary and middle schools. A few corporations and foundations have sponsored our programs with schools in this endeavor, but not to the level of need that exists. We have an extensive list of requests from teachers in Oakland, Richmond, San Francisco, and Santa Clara County for fully, or partially, funded programs. We would like to focus this project on those students who would not otherwise receive this opportunity to participate in our basic science education programs.

We propose a one-year project scheduled for the 1995-96 school year that would involve approximately 2,600 students and teachers. Our goal is to provide a succession of three hands-on programs for 28-35 urban school classes and their teachers, as follows:

1. An eight-hour teacher seminar, "**Estuary Expedition**," for all the teachers involved in this Project. The seminar takes place aboard the ship and in our Discovery Classroom, and will provide Bay ecology background, discovery-based activities, and methods on how to prepare students for the following two programs, or any out-of-the-classroom experience.
2. Each class would receive a fifty-minute introduction to the live animals in the Bay at their school using our outreach program called the **Inland Voyage**. This introduction would provide the students with the pre-Voyage preparation that makes the Discovery Voyage so much more valuable than if they did not receive the preparation.

3. The same classes would participate in the four-hour **Discovery Voyage** aboard our research vessel to capture, examine, and identify fish and invertebrates, use scientific equipment to study water quality and plankton, and perhaps most importantly, discover their own relationship to the environment of the San Francisco Bay Estuary.

### **Evaluation**

Our current evaluation techniques are two-fold. One is a written program evaluation that is disseminated to the teacher prior to the program (please see enclosed form); the other comes directly from the students by way of posters, drawings, letters, poems, and research papers that are sent to the Institute and forwarded to their sponsor. Both methods will be used in this project.

In addition, the Institute will prepare and submit at the end of the school year, no later than June 1, 1996, a full report on the use of these funds, the participating schools, teachers, and number of students. The report will also include copies of the above teacher evaluations collected from each of the three programs that will detail the student outcomes and benefits derived from the programs, as well as individual student correspondence.

### **Budget**

<u>Program</u>	<u>No. Participants &amp; Length of program</u>	<u>No. of Programs &amp; their cost</u>	<u>Total Cost</u>
Teacher Workshop "Estuary Expedition"	35 teachers/8 hours	35 teachers @ \$50each	\$1,750
Inland Voyages	35 students/50 minutes	35 classes @ \$100each	3,500
Discovery Voyages	40 students/ 4 hours	35 classes @ \$1,150	40,250
Allowance for transportation costs (See note below)			<u>4,500</u>
<b>Project Total</b>			<b>\$50,000</b>

Note on Transportation Costs:

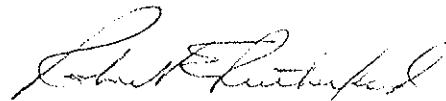
The cost of transportation from the school to the Institute is always a burden to schools. We have found that by relieving part or all of the program cost from the schools, many are able to find funding for the transportation to get here. However, some schools will simply not be able to participate unless attention is given to the transport cost. We suggest that we allocate some of these funds for transport support for a few of the schools that have the most need.

Your organization and Western Microwave may have associates accompany the programs so that they may see their funding in action.

Thank you, again, for this opportunity to submit this Supplemental Environmental Project proposal. Please do not hesitate to call Karen Grimmer, Director of Education, if you wish further clarification on any of the items. I will return from a business trip on July 17, and we will see you at your meeting on July 19. We look forward to discussing this Project with you in detail, and, of course, we look forward to working with the schools, teachers, and students who will benefit from the Project.

This proposal letter is sent by FAX. Our full proposal package will be sent by mail.

Sincerely,

A handwritten signature in cursive script, appearing to read "Robert E. Rutherford".

Robert E. Rutherford  
President

# MARINE SCIENCE INSTITUTE DISCOVERY VOYAGE PROGRAM EVALUATION 1995-96 School Year

Marine Science Institute is continually seeking the comments of teachers regarding our programs. Please take a moment to let us know exactly what parts of the program were successful and what parts may need improvement.

1a. Date your class attended? \_\_\_\_\_ b. Grade of students? \_\_\_\_\_

2. Please Rate the Following: (*Mark only one*)

<u>Items To Be Rated</u>	<u>Rating</u> POOR	FAIR	GOOD	EXCELLENT
Quality of Instruction	_____	_____	_____	_____
Program Content	_____	_____	_____	_____
Overall Organization	_____	_____	_____	_____
Age Appropriateness	_____	_____	_____	_____

3. Why did you select this program?

(*you may mark more than one answer*)

Past Participation \_\_\_\_\_

Advertisement \_\_\_\_\_

Other \_\_\_\_\_

Recommendation \_\_\_\_\_

Curriculum Supplement \_\_\_\_\_

for Unit

Please comment: \_\_\_\_\_

4. Did the program meet your expectations? YES \_\_\_\_ NO \_\_\_\_

5. Did the program meet your student's expectations? YES \_\_\_\_ NO \_\_\_\_

Please comment on Questions 4 and 5:

\_\_\_\_\_

6. Please comment briefly on the aspects of the program that you found most beneficial.

\_\_\_\_\_

7. Please list any suggestions that might improve the program for future classes.

\_\_\_\_\_

8. Are there any other comments, concerns, or suggestions you would like to offer?

\_\_\_\_\_

\_\_\_\_\_

Your Name and School (optional) \_\_\_\_\_

Thank You! Please send to: MSI, 500 Discovery Pkwy, Redwood City, CA 94063